

SEQUENCE LISTING

5 <110> Syngenta Ltd

10 <120> Methods for screening insecticides

15 <130> PPD 50397/WO

20 <160> 21

25 <170> PatentIn version 3.1

30 <210> 1

 <211> 2797

 <212> DNA

 <213> D. melanogaster

35 <400> 1

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 30 <212> PRT
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 20 25 30
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 35 40 45
 55 Leu Asn Arg Ile Leu Ser Gly Gly Gly Ala Asn Ala Ala Gln Gln Thr
 50 55 60
 60 Ala Asp Arg Lys Pro Leu Leu Asp Lys Glu Pro Ala Val Lys Pro Ala
 65 70 75 80

Ala Pro Ala Glu Arg Ala Asp Thr Val Ile Gln Ser Met Leu Gly Asn
85 90 95

5 Ser Pro Pro Ile Ser Pro His Asp Ala Ala Val Asp Leu Gln Tyr His
100 105 110

10 Ser Pro Gly Val Gly Glu Gln Pro Ser Thr Ser Ser Ser His Pro Leu
115 120 125

15 Pro Tyr Ile Ala Asn Ser Pro Asp Phe Asp Leu Lys Thr Phe Met Gln
130 135 140

Thr Asn Tyr Asn Asp Glu Pro Ser Leu Asp Ser Asp Phe Ser Ile Asn
145 150 155 160

20 Ser Ile Glu Ser Val Leu Ser Glu Val Ile Arg Ile Glu Tyr Gln Ala
165 170 175

25 Phe Asn Ser Ile Gln Gln Ala Ala Ser Arg Val Lys Glu Glu Met Ser
180 185 190

30 Tyr Gly Thr Gln Ser Thr Tyr Gly Gly Cys Asn Ser Ala Ala Asn Asn
195 200 205

35 Ser Gln Pro His Leu Gln Gln Pro Ile Cys Ala Pro Ser Thr Gln Gln
210 215 220

Leu Asp Arg Glu Leu Asn Glu Ala Glu Gln Met Lys Leu Arg Glu Leu
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45 Ala Leu Met Met Gly Asp Asp
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55 <213> D. melanogaster

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ctaatgctct ctcactctgt cacacagtaa acggcatact gctctcgttg gttcgagaga 180
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15 <210> 12

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20 <212> DNA

<213> *S. cerevisiae*

25 <400> 12

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30 tctcccaaaa ccaaagggtc tccgctgact agggcacatc tgacagaagt ggaatcaagg 180

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35 ttgaaaatgg attctttaca ggatataaaa gcattgttaa caggattatt tgtacaagat 300

aatgtgaata aagatgccgt cacagataga ttggcttcag tggagactga tatgcctcta 360

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40 caaagacagt tgactgtatc g 441

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45 <211> 147

<212> PRT

<213> *S. cerevisiae*

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 35 40 45

5 Leu Thr Arg Ala His Leu Thr Glu Val Glu Ser Arg Leu Glu Arg Leu
 50 55 60

10 Glu Gln Leu Phe Leu Leu Ile Phe Pro Arg Glu Asp Leu Asp Met Ile
 65 70 75 80

15 Leu Lys Met Asp Ser Leu Gln Asp Ile Lys Ala Leu Leu Thr Gly Leu
 85 90 95

Phe Val Gln Asp Asn Val Asn Lys Asp Ala Val Thr Asp Arg Leu Ala
 100 105 110

20 Ser Val Glu Thr Asp Met Pro Leu Thr Leu Arg Gln His Arg Ile Ser
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30 Thr Val Ser
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40 <213> D. melanogaster

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55 <213> D. melanogaster

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5 Pro Pro Ile Ser Pro His Asp Ala Ala Val Asp Leu Gln Tyr His Ser
275 280 285

10 Pro Gly Val Gly Glu Gln Pro Ser Thr Ser Ser Ser His Pro Leu Pro
290 295 300

15 Tyr Ile Ala Asn Ser Pro Asp Phe Asp Leu Lys Thr Phe Met Gln Thr
305 310 315 320

Asn Tyr Asn Asp Glu Pro Ser Leu Asp Ser Asp Phe Ser Ile Asn Ser
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20 Ile Glu Ser Val Leu Ser Glu Val Ile Arg Ile Glu Tyr Gln Ala Phe
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25 Asn Ser Ile Gln Gln Ala Ala Ser Arg Val Lys Glu Glu Met Ser Tyr
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30 Gly Thr Gln Ser Thr Tyr Gly Gly Cys Asn Ser Ala Ala Asn Asn Ser
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Asp Arg Glu Leu Asn Glu Ala Glu Gln Met Lys Leu Arg Glu Leu Arg
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40 Leu Ala Ser Glu Ala Leu Tyr Asp Pro Val Asp Glu Asp Leu Ser Ala
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45 Leu Met Met Gly Asp Asp Arg Ile Lys Pro Asp Asp Thr Arg His Asn
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50 Pro Lys Leu Leu Gln Leu Ile Asn Leu Thr Ala Val Ala Ile Lys Arg
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55 Leu Ile Lys Met Ala Lys Lys Ile Thr Ala Phe Arg Asp Met Cys Gln
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Glu Asp Gln Val Ala Leu Leu Lys Gly Gly Cys Thr Glu Met Met Ile
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<212> PRT

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5 Thr Val Phe Lys Tyr Gly Asn Arg Cys Phe Thr Ala Tyr Pro Thr Ser
 65 70 75 80

10 Met Pro Asp Tyr Phe Lys Gln Ala Phe Pro Asp Gly Met Ser Tyr Glu
 85 90 95

15 Arg Thr Phe Thr Tyr Glu Asp Gly Gly Val Ala Thr Ala Ser Trp Glu
 100 105 110

Ile Ser Leu Lys Gly Asn Cys Phe Glu His Lys Ser Thr Phe His Gly
 115 120 125

20 Val Asn Phe Pro Ala Asp Gly Pro Val Met Ala Lys Lys Thr Thr Gly
 130 135 140

25 Trp Asp Pro Ser Phe Glu Lys Met Thr Val Cys Asp Gly Ile Leu Lys
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30 Gly Asp Val Thr Ala Phe Leu Met Leu Gln Gly Gly Gly Asn Tyr Arg
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35 Cys Gln Phe His Thr Ser Tyr Lys Thr Lys Lys Pro Val Thr Met Pro
 180 185 190

Pro Asn His Val Val Glu His Arg Ile Ala Arg Thr Asp Leu Asp Lys
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40 Gly Gly Asn Ser Val Gln Leu Thr Glu His Ala Val Ala His Ile Thr
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45 Ser Val Val Pro Phe
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55 <213> Anemonia sulcata

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 35 40 45
 10 Gly Pro Leu Pro Phe Ala Phe His Ile Leu Ser Thr Ser Cys Met Tyr
 50 55 60
 15 Gly Ser Lys Thr Phe Ile Lys Tyr Val Ser Gly Ile Pro Asp Tyr Phe
 65 70 75 80
 20 Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Thr Thr Thr Tyr
 85 90 95
 25 Glu Asp Gly Gly Phe Leu Thr Ala His Gln Asp Thr Ser Leu Asp Gly
 100 105 110
 Asp Cys Leu Val Tyr Lys Val Lys Ile Leu Gly Asn Asn Phe Pro Ala
 115 120 125
 30 Asp Gly Pro Val Met Gln Asn Lys Ala Gly Arg Trp Glu Pro Ala Thr
 130 135 140
 35 Glu Ile Val Tyr Glu Val Asp Gly Val Leu Arg Gly Gln Ser Leu Met
 145 150 155 160
 40 Ala Leu Lys Cys Pro Gly Gly Arg His Leu Thr Cys His Leu His Thr
 165 170 175
 45 Thr Tyr Arg Ser Lys Lys Pro Ala Ser Ala Leu Lys Met Pro Gly Phe
 180 185 190
 His Phe Glu Asp His Arg Ile Glu Ile Met Glu Glu Val Glu Lys Gly
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<213> Zoanthus sp.

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Gly Ile Gly Tyr Pro Phe Lys Gly Lys Gln Thr Ile Asn Leu Cys Val
 35 40 45

25

Ile Glu Gly Gly Pro Leu Pro Phe Ser Glu Asp Ile Leu Ser Ala Gly
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Phe Lys Tyr Gly Asp Arg Ile Phe Thr Glu Tyr Pro Gln Asp Ile Val
 65 70 75 80

Asp Tyr Phe Lys Asn Ser Cys Pro Ala Gly Tyr Thr Trp Gly Arg Ser
 85 90 95

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Phe Leu Phe Glu Asp Gly Ala Val Cys Ile Cys Asn Val Asp Ile Thr
 100 105 110

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Val Ser Val Lys Glu Asn Cys Ile Tyr His Lys Ser Ile Phe Asn Gly
 115 120 125

Met Asn Phe Pro Ala Asp Gly Pro Val Met Lys Lys Met Thr Thr Asn
 130 135 140

45

Trp Glu Ala Ser Cys Glu Lys Ile Met Pro Val Pro Lys Gln Gly Ile
 145 150 155 160

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Leu Lys Gly Asp Val Ser Met Tyr Leu Leu Leu Lys Asp Gly Gly Arg
 165 170 175

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Tyr Arg Cys Gln Phe Asp Thr Val Tyr Lys Ala Lys Ser Val Pro Ser
 180 185 190

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Lys Met Pro Glu Trp His Phe Ile Gln His Lys Leu Leu Arg Glu Asp
 195 200 205

Arg Ser Asp Ala Lys Asn Gln Lys Trp Gln Leu Thr Glu His Ala Ile
 210 215 220

Leu Arg Cys Gln Phe Asp Thr Val Tyr Lys Ala Lys Ser Val Pro Arg
 180 185 190

5 Lys Met Pro Asp Trp His Phe Ile Gln His Lys Leu Thr Arg Glu Asp
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30 <223> Forward degenerate primer

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<221> misc_feature

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